

IN THE CLAIMS

1. (currently amended) A method for configuring a programmable logic controller (PLC) having a protocol, said method implemented by a computer and comprising the ~~step of~~step of: providing, by the computer, an extensible markup language (XML) schema for the protocol of the PLC, wherein said providing an extensible markup language schema comprises formatting an Ethernet Global Data language of the PLC by applying an extensible markup language format, wherein said formatting the Ethernet Global Data language of the PLC comprises providing, within the XML schema, a reference to an address of a location of a variable within the PLC.
2. (currently amended) A method according to Claim 1 further comprising the ~~step of~~step of: configuring the PLC utilizing an XML file with grammar at least partially according to the schema.
3. (currently amended) A method according to Claim 1 further comprising the ~~step of~~step of: utilizing the schema to validate at least one XML file.
4. (original) A method according to Claim 3 wherein said step of utilizing the schema further comprises the step of utilizing the schema to validate at least one XML file created by a configuration tool.
5. (original) A method according to Claim 1 wherein said step of providing an extensible markup language schema further comprises the step of providing an extensible markup language schema for a propriety protocol of the PLC.
6. (original) A method according to Claim 1 wherein said step of providing an extensible markup language schema further comprises the step of providing an extensible markup language schema including definitions for the protocol of the PLC.
7. (original) A method according to Claim 4 wherein said step of utilizing the schema further comprises the step of utilizing the schema to validate at least one XML file created by a configuration tool for a protocol different than the protocol of the PLC.

8. (original) A method according to Claim 3 wherein said step of utilizing the schema further comprises the step of utilizing the schema to validate at least one XML file parsed from a comma separated variable (CSV) file.

9. (original) A method according to Claim 8 wherein said step of utilizing the schema further comprises the step of utilizing the schema to validate at least one XML file parsed from a comma separated variable (CSV) file created by a configuration tool.

10. (original) A method according to Claim 8 wherein said step of utilizing the schema further comprises the step of utilizing the schema to validate at least one XML file parsed from a comma separated variable (CSV) file created by a configuration tool for a protocol different than the protocol of the PLC.

11. (canceled)

12. (currently amended) A method according to Claim 1 further comprising the ~~step of~~step of: utilizing the schema to validate at least one XML file.

13. (original) A method according to Claim 12 wherein said step of utilizing the schema further comprises the step of utilizing the schema to validate at least one XML file created by an Ethernet Global Data configuration tool.

14. (original) A method according to Claim 1 wherein said step of providing an XML schema further comprises the step of providing an XML schema for the protocol of the PLC, the schema including at least one of an Build Information element, a Device element, and an Exchange element.

15. (previously presented) A method according to Claim 1 wherein said step of providing an XML schema further comprises the step of providing, by a processor, an XML schema for the protocol of the PLC, the schema including at least one of an Build Information element, a Device element, and an Exchange element, the Build Information element including at least one of a Name element, a Description element, a Tool element, a Validation Code element, a Last Build Date element, and a Last Build Time element.

16. (previously presented) A method according to Claim 1 wherein said step of providing an XML schema further comprises the step of providing, by a processor, an XML schema for the protocol of the PLC, the schema including at least one of an Build Information element, a Device element, and an Exchange element, the Device element including at least one of a Build Information element, a Device Configuration element, and a Device Validation element.

17. (previously presented) A method according to Claim 1 wherein said step of providing an XML schema further comprises the step of providing, by a processor, an XML schema for the protocol of the PLC, the schema including at least one of an Build Information element, a Device element, and an Exchange element, the Exchange element including at least one of a Build Information element, a Name element, a Description element, a Producer Identifier (ID) element, a Exchange ID element, a Signature element, a Source element, a Destination element, a Period element, and a Timeout element.

18. (previously presented) A method according to Claim 1 wherein said step of providing an XML schema further comprises the step of providing, by a processor, an XML schema for the protocol of the PLC, the schema including at least one of an Build Information element, a Device element, and an Exchange element, the Build Information element including at least one of a Name element, a Description element, a Tool element, a Validation Code element, a Last Build Date element, and a Last Build Time element, the Device element including at least one of a Build Information element, a Device Configuration element, and a Device Validation element, the Exchange element including at least one of a Build Information element, a Name element, a Description element, a Producer Identifier (ID) element, a Exchange ID element, a Signature element, a Source element, a Destination element, a Period element, and a Timeout element.

19. (currently amended) A method for configuring a programmable logic controller (PLC) having a protocol, said method ~~comprising~~comprising: utilizing a schema to validate at least one XML file parsed from a comma separated variable (CSV) file created by a configuration tool for a protocol different than the protocol of the PLC.

20. (currently amended) A method for configuring a programmable logic controller (PLC) having a protocol, said method ~~comprising~~comprising: utilizing a schema to validate at least one XML file parsed from a comma separated variable (CSV) file created by a configuration tool.

21. (new) A method according to Claim 1 wherein the PLC includes a field programmable gate array (FPGA).

22. (new) A method according to Claim 1 wherein the XML schema includes a reference to a point address format of the variable as applied by a human machine interface.